

ABSTRACT OF THE DISCLOSURE

A brush motor for an electric power steering system comprises a four-pole field portion 3, an armature 4 having windings 9 wound around a core 5 with 22 slots 8 to constitute a lap winding, hooks 12 which are formed on one ends of 22 commutator segments 10 respectively and on which the windings 9 are hooked, and a cylindrical commutator 7 constructed by molding integrally the commutator segments 10 with a resin, and four brushes 18 which contact slidably to outer peripheral surfaces of the commutator segments 10, wherein, when the commutator 7 to which a sliding contact portion of the brush 18 contacts is sectioned perpendicularly to an axial direction, a relationship of $0.18 \leq (A \times N) / (D \times D) \leq 0.23$ is satisfied,

where A is a sectional area of one commutator segment, N is a number of the commutator segments, and D is a diameter of outer peripheral surfaces of the commutator segments.